IPART
Independent Pricing and Regulatory Tribunal
New South Wales

PRICES FOR SYDNEY WATER FROM 1 JULY 2020

Outline

WATER REVIEWS

September 2019

Summary

The Independent Pricing and Regulatory Tribunal of NSW (IPART or we) is setting the **maximum prices Sydney Water Corporation (Sydney Water) can charge** for the water, wastewater and stormwater drainage services it provides to residential and non-residential customers. We will also set the maximum prices for Sydney Water's trade waste services and a range of ancillary and miscellaneous services, and monitor Sydney Water's recycled water prices.

We will set prices to apply from 1 July 2020 for up to five years.

We have released this Issues Paper to

Summarise Sydney Water's proposed revenue needs and prices for the 2020 determination period.

Outline the process we will follow to conduct the review, including the decisions we will make.

Seek stakeholder feedback on the key issues for this review.

Sydney Water's proposed prices and bill impacts

Water prices	Maintain water usage price in real terms, with a price of $2.13/kL (in $19/20), based on the results of its customer engagement and its updated estimates of the long-run marginal cost (LRMC) of water supply. Reduce water service prices by 12% in the first year of the period (or $10 per year for a typical household), and then maintain constant prices in real terms.
Wastewater prices	Reduce the wastewater usage price by 48% in the first year of the period, to $0.61/kL, based on the short-run marginal cost (SRMC) of providing wastewater treatment services. Increase the wastewater service price by 12% in the first year of the period, and then maintain constant prices.
Stormwater prices	Increase stormwater service charges by 8% in the first year of the period, then maintain constant prices. This is applicable to 25% of Sydney Water's customers who recieve stormwater services from Sydney Water.
Typical bill	A typical bill would fall by about 4% (in real terms), reflecting the reduced water service price.

Sydney Water's proposal

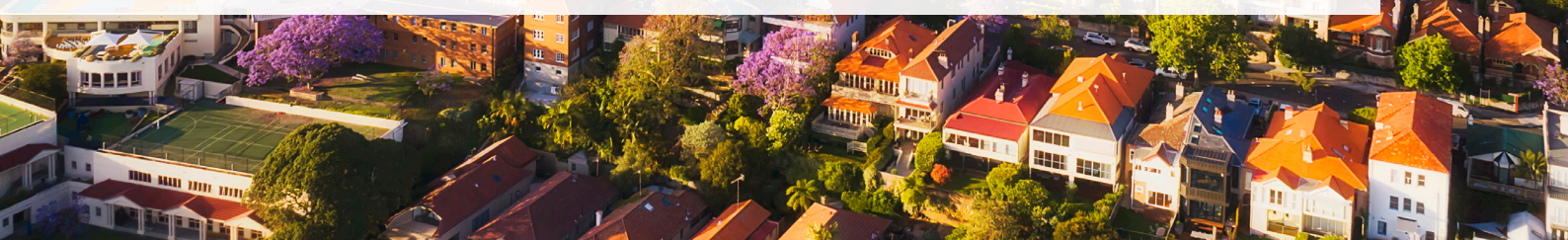
Revenue requirement	$10.7 billion over four years from 1 July 2020 (compared to $10.5 billion over four years from 1 July 2016). Large increase in capital expenditure driven by investment in wastewater assets to meet future growth and the costs of more conservative asset management practices. Revenue is based on "average" weather conditions, with Sydney Water to absorb any additional costs it will incur if drought continues.
Customer prices	Average real bill reduction of about 4% for a typical residential household owing to lower interest rates. Proposed reduction in the wastewater usage price based on short-run costs. This change would increase prices for residential customers, and reduce prices for non-residential customers.
Encouraging better outcomes	Engaged with over 10,000 customers on prices and some 'discretionary' projects before submitting its pricing proposal. Proposed $100 million of 'discretionary' expenditure based on this engagement.

IPART's review approach

Revenue requirement	Engage expert consultants to review Sydney Water's historical and proposed costs, and apply a building block model to establish Sydney Water's efficient revenue needs.
Customer prices	Set maximum prices to recover Sydney Water's efficient costs, taking into account our pricing principles and the requirements of the IPART Act.
Encouraging better outcomes	Review Sydney Water's customer engagement including discretionary projects. Consider a range of measures to encourage Sydney Water to be more efficient and deliver better outcomes to customers

Key review issues

Revenue requirement	Is the large increase in expenditure required and sufficiently justified? Are Sydney Water's planned investments to service Sydney's growing population efficient? Should Sydney Water's efficient costs be based on "average" weather conditions, or expected conditions over the next four years?
Customer prices	Setting cost-reflective water and wastewater usage prices, by developing more accurate estimates of the long-run costs of providing these services. How can Sydney Water's customer engagement be improved to inform future pricing proposals?

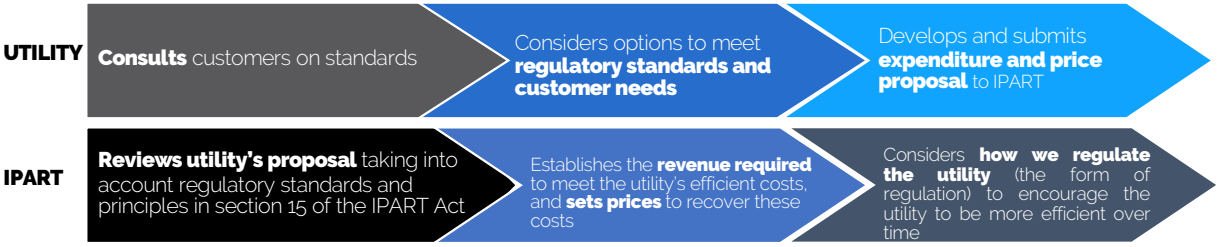


Process for conducting the review

We received Sydney Water's pricing proposal on 1 July 2019, which outlines its proposed revenue needs and prices. It is available on our website.

Our Issues Paper explains the propose-respond process we will follow to conduct the review, the approach we will use to make our pricing decisions, and the key issues we will consider in making these decisions. It also sets out our preliminary views on some of these issues. We invite all interested parties to make submissions in response to this paper (details on how to make a submission are provided on page iii at the start of the paper).

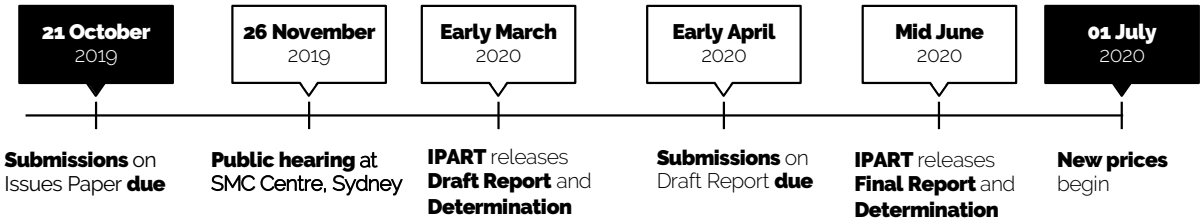
Figure 1.1 How prices are set under a propose-respond regulatory model



We will hold a public hearing on November 26, 2019, to provide stakeholders with another opportunity to provide their views on Sydney Water's pricing proposal and the key issues for this review.

We will consider all comments made in submissions and at the public hearing before making our draft decisions. We will then release a Draft Report and Draft Determination, and invite further comments from stakeholders and Sydney Water. There will be a further opportunity provided to respond to our Draft Report in March 2020. We will consider all these comments before making our Final Determination and publishing our Final Report in June 2020.

Figure 1.2 Indicative timetable for this review



Note: These dates are indicative and may

Sydney Water's pricing proposal

Sydney Water has proposed that it requires $10.7 billion of revenue over the next four years to recover its operating, capital and other costs (Table 1.1).[1] This is $0.2 billion (2%) higher than the allowance we set for the 2016 determination, which covered the 4-year period from 2016-17 to 2019-20, and is comparable with Sydney Water's forecast actual expenditure of $10.8 billion over this period.

Table 1.1 Sydney Water's proposed revenue ($2019-20 billion)

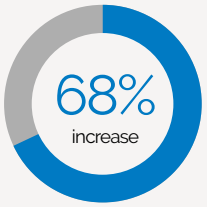
Proposed revenue by costs	2016 determination IPART allowance	2016 determination Sydney Water's forecast costs	2020 determination Sydney Water's forecast costs
Operating costs	5.4	5.5	5.4
Capital costs[a]	4.8	5.0	5.0
Other costs[b]	0.3	0.3	0.3
Notional revenue requirement	**10.5**	**10.8**	**10.7**

a This includes a 'return on assets' and a 'return of assets' b This includes the allowance for a return on working capital and a tax allowance
Note: Totals may not add up due to rounding. Source: Sydney Water Price Proposal 2020-24, IPART, Review of Prices for Sydney Water Corporation from 1 July 2016 to 30 June 2020 - Final Report, June 2016, p 75; IPART analysis.

Capital expenditure

As outlined in Chapter 4 of this report, the efficient capital expenditure that Sydney Water incurs is added to a Regulatory Asset Base (RAB) and recovered from customers over time.

Sydney Water has proposed capital expenditure of $4.5 billion over the 2020 determination period, a 68% increase compared to what we allowed ($2.7 billion) in the 2016 determination. As shown in Figure 1.3, these costs are much higher than Sydney Water's historical average capital expenditure, and are driven by the costs of:



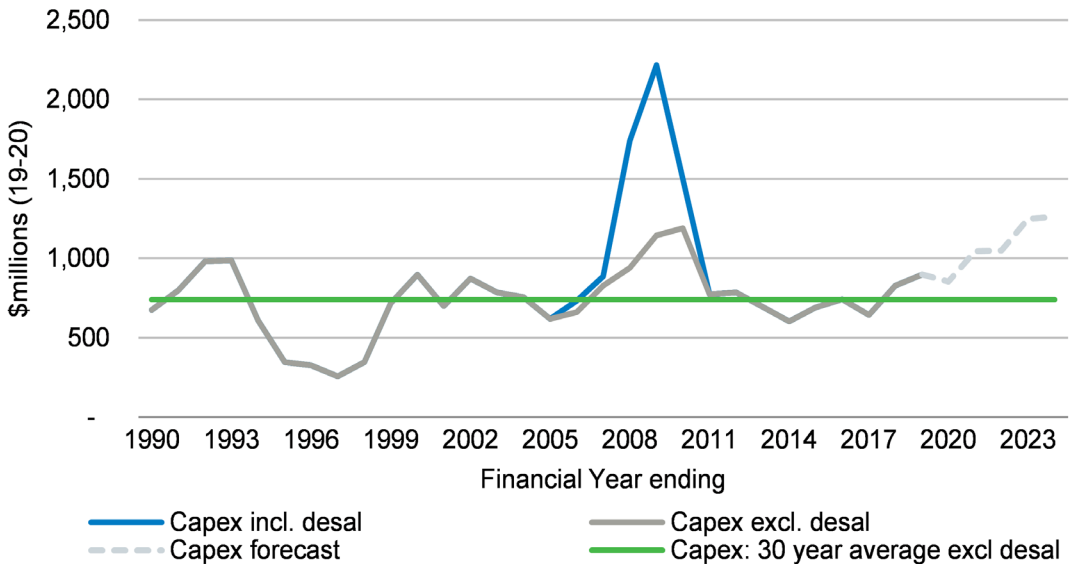
Sydney Water proposed a 68% increase in capital costs for the 2020 determination period.

- **Servicing growth**. In the absence of developer charges, the increased costs of servicing new development are borne by the broader customer base, and this factor represents 42% ($570 million) of the proposed increase in capital expenditure.
- **Proactive asset management.** Sydney Water intends to implement a more proactive asset management strategy to respond to a recent deterioration in performance, particularly the environmental performance of its wastewater network. This accounts for 52% ($704 million) of the proposed increase in capital expenditure.

The large increase in capital expenditure has been offset by a reduction in interest rates – referred to as the Weighted Average Cost of Capital (WACC). Sydney Water proposed a WACC of 4.1% for the 2020 determination period (compared to a WACC of 4.9% in the 2016 determination period).

1 All prices presented in this Issues Paper are in $2019-20 unless otherwise specified.

Figure 1.3 SWC's capital investment from 1990 to 2024 ($2019–20 million)



Data source: Sydney Water Price proposal 2020-24, Attachment 9 Capital expenditure, Figure 2-4, p 60.

Operating expenditure

Sydney Water proposed a 2% increase in core operating costs[2] for the 2020 determination period, compared to what we allowed in the 2016 determination period. Sydney Water's intention to implement more proactive asset management would increase its operating costs.

Sydney Water proposed a 2% increase in core operating costs for the 2020 determination period.

While drought conditions over the 2016 determination period have increased Sydney Water's operating costs in recent years, including expenditure on weather related network repairs and maintenance, **Sydney Water's proposed operating expenditure over the 2020 determination period assumes average weather conditions.** If drought continues, Sydney Water anticipates a further increase in operating expenditure in 2019-20 and into the 2020 determination period.

Around 30% of Sydney Water's proposed operating costs are for 'bulk water'. Sydney Water does not own or operate the assets that produce 'bulk water', such as dams and desalination plants, and instead is supplied with bulk water from WaterNSW and the Sydney Desalination Plant (SDP).

Concurrent to this review of Sydney Water's prices, we are reviewing and setting the prices for WaterNSW's bulk water supply costs to Sydney Water. For more information, please see our Issues Paper on our *Review of prices for WaterNSW Greater Sydney from 1 July 2020.*

We set the prices that Sydney Water pays the Sydney Desalination Plant in our *2017 Review of prices for the Sydney Desalination Plant*. In this review, we will also decide how the desalination costs we previously set are reflected in Sydney Water's prices to its customers.

In August 2019, as a consequence of the current drought conditions, the NSW Government annouced that it had begun preliminary planning to double the capacity of the Sydney Desalination Plan. An augmentation to the existing Sydney Desalination Plant may impact the prices Sydney Water pays for its bulk water.

2 Core operating costs exclude bulk water purchase costs from WaterNSW and SDP.

Customer engagement

In 2018, Sydney Water undertook a customer engagement program to help inform parts of its pricing proposal. This included consulting customers on their preferred price structures, and estimating customers' willingness-to-pay for four 'discretionary' projects that are above and beyond Sydney Water's current service and regulatory obligations.

From this, Sydney Water identified three discretionary projects, with a total cost of around $100 million, that it proposes are funded by customers over the 2020 determination period.

Sydney Water's proposed prices

The table below shows the key prices that Sydney Water has proposed.

Table 1.2 Key prices in Sydney Water's price proposal ($2019-20)

	2019-20	2020-21	2021-22	2022-23	2023-24
Water					
Residential service price $/year	83	73	73	73	73
Water usage price[a] $/kL	2.13	2.13	2.13	2.13	2.13
20mm non-residential service charge[b] $/year	83	73	73	73	73
Wastewater					
Residential service price $/year	590	658	658	658	658
Deemed wastewater usage charge $/a (residential and non-residential)	178	92	92	92	92
20 mm non-residential service charge[b] $/year	590	658	658	658	658
Wastewater usage price $/kL	1.18	0.61	0.61	0.61	0.61
Stormwater					
Units, small (<200 sq m) non-residential $/year	25	27	27	27	27
Houses, medium (201-1,000 sqm) non-residential $/year	80	86	86	86	86
Large (1,001 - 10,000 sqm) non-residential $/year	463	502	502	502	502
Very large (10,001 - 45,000 sqm) non-residential $/year	2,059	2,230	2,230	2,230	2,230
Largest (>45,000 sqm) non-residential $/year	5,148	5,576	5,576	5,576	5,576

a Water usage price excludes cost pass-throughs from the Sydney Desalination Plant. Non-residential service charges for larger water meter sizes are calculated as: (meter size in mm)^{2}x(20 mm meter price)/400.

b All wastewater prices assume a 100% sewerage discharge factor (SDF). Sydney Water's default SDF is 78%.

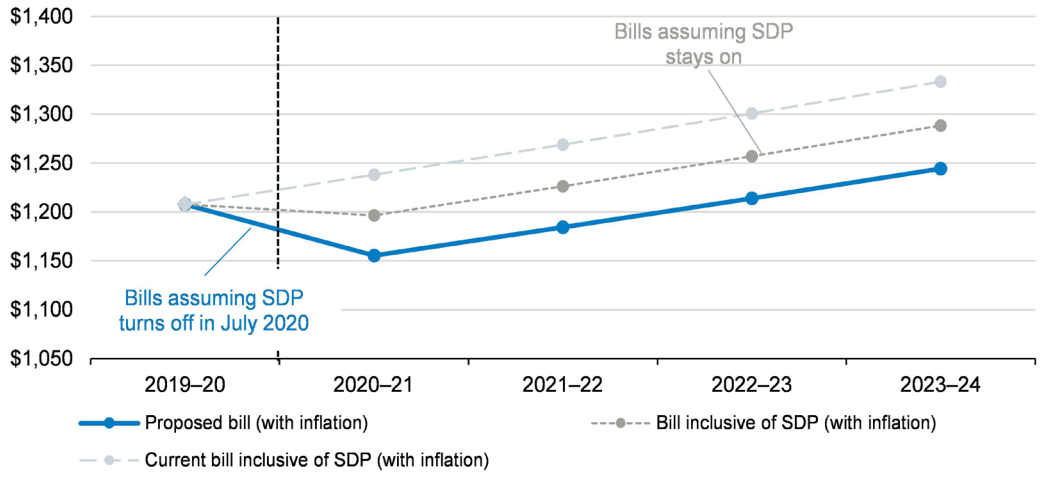
Note: 2019-20 prices were not available when Sydney Water finalised its pricing proposal. The prices for 2019-20 are based on Sydney Water's forecast of inflation, and some costs.

Source: Sydney Water Annual Information Return to IPART, July 2019.

Bill impacts

Sydney Water indicated that under its proposal, a typical annual residential water and wastewater bill would be about $45 (or 4%) lower in real terms, from year 2020-21, and then increase at the rate of inflation over the 2020 determination period. This assumes that the SDP is not supplying water to Sydney Water. If SDP is operational, Sydney Water expects this to add about $40 per year to a typical residential bill (see Figure 1.4).

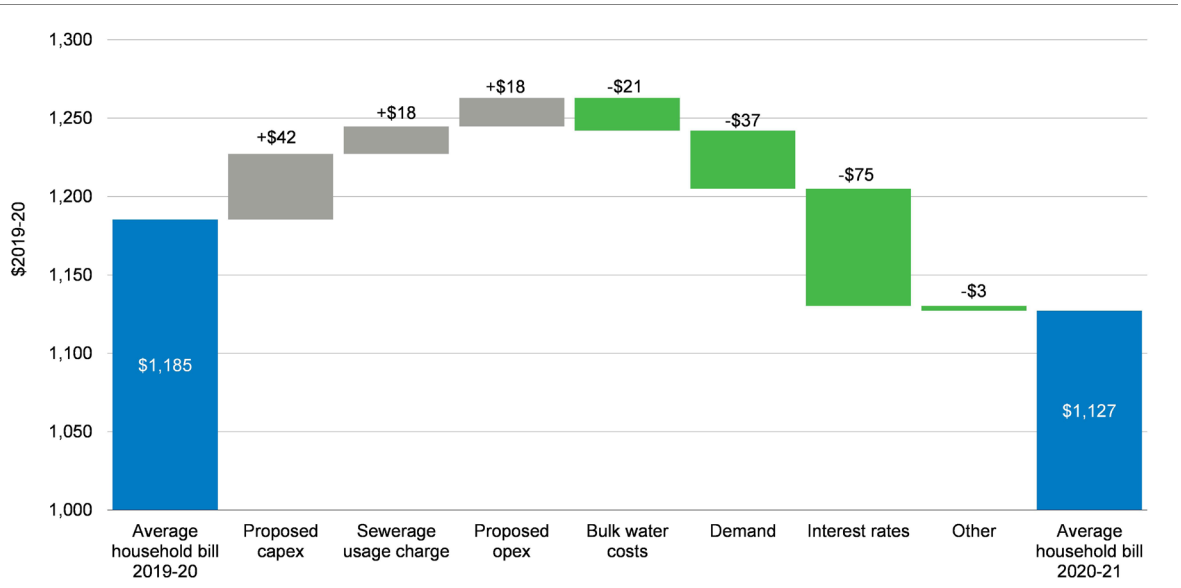
Figure 1.4 Sydney Water's proposed customer bills ($nominal)



While non-residential customers' bill impacts depend on their meter size and discharge factors as well as their water and wastewater usage, Sydney Water's proposed bill reduction for these customers would generally be greater than or equal to the proposed reduction for residential customers.

Figure 1.5 highlights the cost drivers that impact customer bills. It shows that the decrease in customer bills is largely driven by a reduction in interest rates.

Figure 1.5 Cost drivers of Sydney Water's proposed residential bills



Source: Sydney Water Price proposal 2020-24, IPART analysis.

Key issues for this review

Sydney Water's proposed increases in capital and operating expenditure

As outlined above, Sydney Water has proposed a 68% increase in capital expenditure from what we allowed in the 2016 determination period, as well as an increase in operating expenditure. The increased expenditure is driven by the costs of servicing growth, as well as a change in its asset management strategy to a more proactive asset management approach. The change in asset management is also to address recent deterioration in the environmental performance of its wastewater network.

This is a large increase in expenditure. We will decide whether an increase of this magnitude is required and sufficiently justified. In setting prices, we will also investigate to what extent increased expenditure is required as a result of past performance, and whether it is appropriate for these costs to be borne by customers in future periods.

We have engaged expert consultants - Atkins Cardno (Atkins) - to review Sydney Water's historical capital expenditure, and its proposed operating and capital expenditure. Atkins will make recommendations to IPART on Sydney Water's efficient operating and capital expenditure. When making our decisions, we will consider our consultants' recommendations, the information we receive from Sydney Water and stakeholder feedback.

Basing expenditure on 'average' weather conditions

Sydney Water has proposed an operating expenditure allowance for the 2020 determination period that it considers is based on a return to 'average' weather conditions. If drought persists, it proposes to absorb any additional operating expenditure that it directly incurs.

First, we will assess whether Sydney Water's proposed costs truly reflect a return to 'average' weather conditions. For example, Sydney Water's proposed increase in expenditure on preventative maintenance may be partly a response to drier weather conditions. However, we also need to decide whether Sydney Water's allowance should be based on average weather conditions. This includes its expenditure on water conservation and drought response measures. More broadly, in our concurrent review of WaterNSW Greater Sydney prices, WaterNSW has proposed a number of cost pass-throughs, including for contingent projects that WaterNSW considers it may need to proceed with to ensure water security. In the WaterNSW review, we will consider if any of these cost pass-throughs are appropriate. If they are, in this review we will consider how these costs would be reflected the prices Sydney Water charges its customers.

Setting efficient water and wastewater usage prices

When setting prices, we balance our preference for prices to be cost-reflective against a range of other factors, including customer affordability and government funding commitments.

When setting water usage prices, we have generally favoured setting prices with reference to the long-run marginal cost (LRMC) of water supply. This is because LRMC signals the costs of supplying water to meet demand over the long-term, including the costs of any required future supply augmentation measures. As discussed in Chapter 7 of our Issues Paper, in this review we aim to improve upon our existing estimates of LRMC for Sydney Water.

For wastewater usage charges, we have typically not set these prices with reference to LRMC. In large part, this has reflected data limitations. It also reflects that wastewater is managed over multiple catchments that are not connected, and setting a single usage price will not be perfectly cost-reflective for all customers. In contrast, water is provided across an interconnected network.

Nevertheless, we also see merit in setting wastewater usage prices with reference to LRMC, as this would signal the long-term capital costs that Sydney Water will need to incur to meet increased demand. Accurate estimates of the LRMC of wastewater supply, preferably by supply catchment, would inform Sydney Water's expenditure planning, the calculation of avoided costs associated with recycling schemes (and hence assessment of the viability of recycled water schemes), and the calculation of wholesale prices to wholesale customers. Through this review we propose working with Sydney Water to collect data to estimate the LRMC for wastewater services.

Sustainability of price decreases

Because interest rates have fallen, Sydney Water has been able to propose a small bill reduction despite a large increase in expenditure. However, over the medium-longer term, bill increases may be larger and significant, especially if interest rates rise.

As discussed further in Chapter 2 of our Issues Paper, a key driver of Sydney Water's increased expenditure is the costs that Sydney Water incurs to service new development as Sydney's population expands. For many water utilities, a 'developer charge' is levied on a developer, to provide a signal to the developer about the costs of servicing new properties. In contrast, because developer charges are set to zero for Sydney Water, these costs are instead added to Sydney Water's RAB and gradually recovered from the broader customer base. This means that over time the costs of servicing new growth accumulate and place upward pressure on prices, potentially reducing the affordability of bills.

We are interested in your views

We will **consider all feedback** when making our draft decisions.

We will **accept stakeholder** feedback on for this stage of our review **until 21 October 2019.**

There are **two** ways to have your say:

1. Make a submission to our Issues Paper

Our Issues Paper contains more details and analysis on a range of topics, and includes a **full list of questions** for stakeholders.

You can make a submission until 21 October 2019, by following the links on our Sydney Water review page on our website – www.ipart.nsw.gov.au.

You can make a formal submission on our website or by post.

Postal address:

Review of prices for Sydney Water Corporation
Independent Pricing and Regulatory Tribunal
PO Box K35 Haymarket Post Shop,
Sydney, NSW 1240

2. Provide feedback on our website

A few of the key issues that we would like feedback on are outlined below. You can provide your comments by 21 October 2019 in the boxes provided on our customer feedback section on the Sydney Water review page on our website.

On our website, we have highlighted the following four 'focus' areas where we seek feedback:

▼ **Protecting the environment.**
Could Sydney Water's customer engagement beimproved to inform future pricing proposals? For example, should Sydney Water's customer engagement program focus more on environmental outcomes and performance?

▼ **Planning for the future.**
How should Sydney Water plan and recover the investments needed to service Sydney's growing population?

▼ **Drought and water scarcity.**
How should our review account for the risks of drought and support water conservation?

▼ **Customer Preferences.**
How should customer preferences be considered, alongside conomic costs and benefits, when setting prices?

Other opportunities to have your say

Stakeholders will have further opportunities to provide feedback at our public hearing to be held in Sydney (26 November 2019), or in response to our Draft Report (March 2020).